

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) An image forming apparatus for forming an image based on input image data, the image forming apparatus comprising:
volatile storage means that stores an encryption key to be set when power is on; and
encryption and decryption means that encrypts image data using ~~an~~ the encryption key prior to the storage of the input image data onto image storage means, and decrypts the encrypted image data subsequent to the reading of the encrypted image data from the image storage means.
2. (Currently Amended) The image forming apparatus according to claim 1, further comprising non-volatile storage means for storing the encryption key,
wherein the encryption and decryption means temporarily stores the encryption key, sent from the non-volatile storage means, in a temporary storage unit ~~therewithin~~, when the image data is stored onto the image storage means ~~and/or~~ or when the encrypted image data is read from the image storage means.
3. (Original) The image forming apparatus according to claim 2, wherein the encryption and decryption means and the non-volatile storage means are arranged in separate units.
4. (Original) The image forming apparatus according to claim 1, further comprising encryption key generating means for generating a random number and producing the encryption key that contains at least a portion of the generated random number.
5. (Original) The image forming apparatus according to claim 2, further comprising encryption key generating means for generating a random number and producing the encryption key that contains at least a portion of the generated random number.
6. (Currently Amended) The image forming apparatus according to claim 2, further comprising encryption key compression and decompression means for compressing ~~and/or~~ or decompressing the encryption key using a predetermined compression and decompression method,

wherein the compressed encryption key is stored onto the non-volatile storage means and when the encryption key is used, the compressed encryption key is read from the non-volatile storage means.

7. (Currently Amended) The image forming apparatus according to claim 4, further comprising encryption key compression and decompression means for compressing ~~and/or~~ or decompressing the encryption key using a predetermined compression and decompression method,

wherein the compressed encryption key is stored onto the non-volatile storage means and when the encryption key is used, the compressed encryption key is read from the non-volatile storage means.

8. (Currently Amended) The image forming apparatus according to claim 5, further comprising encryption key compression and decompression means for compressing ~~and/or~~ or decompressing the encryption key using a predetermined compression and decompression method,

wherein the compressed encryption key is stored onto the non-volatile storage means and when the encryption key is used, the compressed encryption key is read from the non-volatile storage means.

9. (Currently Amended) The image forming apparatus according to claim 6, wherein the encryption key compression and decompression means applies an image compression and decompression unit for compressing ~~and/or~~ or decompressing the image data.

10. (Currently Amended) The image forming apparatus according to claim 7, wherein the encryption key compression and decompression means applies an image compression and decompression unit for compressing ~~and/or~~ or decompressing the image data.

11. (Currently Amended) The image forming apparatus according to claim 8, wherein the encryption key compression and decompression means applies an image compression and decompression unit for compressing ~~and/or~~ or decompressing the image data.

12. (Currently Amended) An image forming apparatus for forming an image based on input image data, the image forming apparatus comprising:

display means for displaying an image on a screen so as to prompt a user to input a key a plurality of times when power is on;

input means for capturing a key value of an encryption key input by a user during the setting of the encryption key;

key value determining means for determining whether key values input by the user by a predetermined number of times match each other;

non-volatile storage means for storing the key value input as an encryption key if the key value determining means determines that the key values match each other; and

encryption and decryption means for encrypting the image data using an encryption key prior to the storage of the input image data onto image storage means, and for decrypting the encrypted image data subsequent to the reading of the encrypted image data from the image storage means.

13. (Currently Amended) The image forming apparatus according to claim 12, ~~further comprising wherein the display means for displaying~~ displays the key value captured by the input means, and ~~converting~~ converts an input key value into a form having no specific meaning.

14. (Original) The image forming apparatus according to claim 13, wherein the display means divides the key value of M digits on an N digits by N digits basis (M being greater than N), and converts a part of the key value of the N digits into a form having no specific meaning as soon as the inputting of the key value of the part of the N digits is completed.

15. (Original) The image forming apparatus according to claim 12, wherein the inputting and displaying of the key value is performed in one of a decimal format and a hexadecimal format.

16. (Original) The image forming apparatus according to claim 13, wherein the inputting and displaying of the key value is performed in one of a decimal format and a hexadecimal format.

17. (Original) The image forming apparatus according to claim 14, wherein the inputting and displaying of the key value is performed in one of a decimal format and a hexadecimal format.

18. (Currently Amended) A method for inputting the setting of ~~an~~ an encryption key for use in the encryption of image data, the encryption key being used to store input image data in image storage means, the method comprising the steps of:

displaying an image on a screen so as to prompt a user to input a key a plurality of times when power is on;

capturing key values of the encryption key input by a user;

determining whether the key values input by the user by a predetermined number of times match each other; and

storing, in non-volatile storage means, the input key value as the encryption key when the key values match each other in the key value determining step.

19. (Currently Amended) The method according to claim 18, ~~further comprising wherein a step for displaying~~ the displaying step displays the key value captured in the capturing step, and ~~for converting~~ converts an already input key value into a form having no specific meaning.